

SEQUENCE LISTING

<110> Donoho, Gregory
Scoville, John
Turner, C. Alexander Jr.
Friedrich, Glenn
Zambrowicz, Brian
Sands, Arthur T.

<120> NOVEL HUMAN THROMBOSPONDIN REPEAT PROTEINS AND
POLYNUCLEOTIDES ENCODING THE SAME

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 <212> PRT
 <213> homo sapiens

<400> 4
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 Asp Thr Thr Gly Glu Gln Phe Leu Thr Tyr Arg Tyr Asp Asp Gln Thr

Leu Gly Leu His Val Pro Cys Pro Val Glu Glu Gly Phe Arg Asp Gly
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 Ala Leu Cys Val
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 <211> 724
 <212> PRT
 <213> homo sapiens

<400> 8
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 Tyr Phe Leu Pro Glu Phe Ala Leu Ser Pro Gln Gly Ser Phe Leu Glu
 35 40 45
 Asp Thr Thr Gly Glu Gln Phe Leu Thr Tyr Arg Tyr Asp Asp Gln Thr
 50 55 60

Ser	Arg	Asn	Thr	Arg	Ser	Asp	Glu	Asp	Lys	Asp	Gly	Asn	Trp	Asp	Ala
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Trp	Gly	Asp	Trp	Ser	Asp	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser
				85					90					95	
Tyr	Ser	Leu	Arg	Arg	Cys	Leu	Thr	Gly	Arg	Asn	Cys	Glu	Gly	Gln	Asn
				100					105					110	
Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp	Cys	Pro	Pro	Asp	Ala	Glu
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Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	Tyr	Asn	Asp	Val	Gln	Tyr	Gln
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Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr	Asn	Asp	Pro	Ala	Ala	Pro
145					150					155					160
Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln	Asn	Leu	Val	Val	Glu	Leu
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Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys	Asn	Thr	Asp	Ser	Leu	Asp
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Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly	Val	Cys	Ala	Gly	Asp	Gly
		210				215					220				
Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser	Lys	Ser	His	Val	Ser	Pro
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Glu	Lys	Arg	Glu	Glu	Asn	Val	Ile	Ala	Val	Pro	Leu	Gly	Ser	Arg	Ser
				245						250				255	
Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His	Leu	Phe	Ile	Glu	Ser	Lys
			260					265					270		
Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser	Phe	Asn	Ser	Pro	Gly	Val
		275					280					285			
Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe	Gln	Arg	Gly	Ser	Glu	Arg
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Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met	Ala	Asp	Phe	Ile	Phe	Lys
305					310					315					320
Thr	Arg	Tyr	Thr	Ala	Ala	Lys	Asp	Ser	Val	Val	Gln	Phe	Phe	Phe	Tyr
				325					330					335	
Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr	Asp	Phe	Phe	Pro	Cys	Thr
			340					345					350		
Val	Thr	Cys	Gly	Gly	Gly	Tyr	Gln	Leu	Asn	Ser	Ala	Glu	Cys	Val	Asp
		355					360					365			
Ile	Arg	Leu	Lys	Arg	Val	Val	Pro	Asp	His	Tyr	Cys	His	Tyr	Tyr	Pro
	370					375					380				
Glu	Asn	Val	Lys	Pro	Lys	Pro	Lys	Leu	Lys	Glu	Cys	Ser	Met	Asp	Pro
385					390					395					400
Cys	Pro	Ser	Ser	Asp	Gly	Phe	Lys	Glu	Ile	Met	Pro	Tyr	Asp	His	Phe
			405						410					415	
Gln	Pro	Leu	Pro	Arg	Trp	Glu	His	Asn	Pro	Trp	Thr	Ala	Cys	Ser	Val
			420					425					430		
Ser	Cys	Gly	Gly	Gly	Ile	Gln	Arg	Arg	Ser	Phe	Val	Cys	Val	Glu	Glu
		435				440						445			
Ser	Met	His	Gly	Glu	Ile	Leu	Gln	Val	Glu	Glu	Trp	Lys	Cys	Met	Tyr
	450					455					460				
Ala	Pro	Lys	Pro	Lys	Val	Met	Gln	Thr	Cys	Asn	Leu	Phe	Asp	Cys	Pro
465					470					475					480
Lys	Trp	Ile	Ala	Met	Glu	Trp	Ser	Gln	Cys	Thr	Val	Thr	Cys	Gly	Arg
				485					490					495	
Gly	Leu	Arg	Tyr	Arg	Val	Val	Leu	Cys	Ile	Asn	His	Arg	Gly	Glu	His
			500					505					510		
Val	Gly	Gly	Cys	Asn	Pro	Gln	Leu	Lys	Leu	His	Ile	Lys	Glu	Glu	Cys
		515					520					525			
Val	Ile	Pro	Ile	Pro	Cys	Tyr	Lys	Pro	Lys	Glu	Lys	Ser	Pro	Val	Glu
	530					535					540				
Ala	Lys	Leu	Pro	Trp	Leu	Lys	Gln	Ala	Gln	Glu	Leu	Glu	Glu	Thr	Arg
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Ile	Ala	Thr	Glu	Glu	Pro	Thr	Phe	Ile	Pro	Glu	Pro	Trp	Ser	Ala	Cys

<211> 650
 <212> PRT
 <213> homo sapiens

<400> 10

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			20					25					30		
Asn	Cys	Glu	Gly	Gln	Asn	Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp
		35					40					45			
Cys	Pro	Pro	Asp	Ala	Glu	Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	Tyr
	50					55					60				
Asn	Asp	Val	Gln	Tyr	Gln	Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr
65					70					75				80	
Asn	Asp	Pro	Ala	Ala	Pro	Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln
				85					90					95	
Asn	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys
			100					105					110		
Asn	Thr	Asp	Ser	Leu	Asp	Met	Cys	Ile	Ser	Gly	Ile	Cys	Gln	Ala	Val
		115				120						125			
Gly	Cys	Asp	Arg	Gln	Leu	Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly
	130					135						140			
Val	Cys	Ala	Gly	Asp	Gly	Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser
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Lys	Ser	His	Val	Ser	Pro	Glu	Lys	Arg	Glu	Glu	Asn	Val	Ile	Ala	Val
				165					170					175	
Pro	Leu	Gly	Ser	Arg	Ser	Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His
			180					185					190		
Leu	Phe	Ile	Glu	Ser	Lys	Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser
		195					200					205			
Phe	Asn	Ser	Pro	Gly	Val	Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe
	210					215					220				
Gln	Arg	Gly	Ser	Glu	Arg	Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met
225					230					235					240
Ala	Asp	Phe	Ile	Phe	Lys	Thr	Arg	Tyr	Thr	Ala	Ala	Lys	Asp	Ser	Val
				245					250					255	
Val	Gln	Phe	Phe	Phe	Tyr	Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr
			260					265					270		
Asp	Phe	Phe	Pro	Cys	Thr	Val	Thr	Cys	Gly	Gly	Gly	Tyr	Gln	Leu	Asn
	275					280						285			
Ser	Ala	Glu	Cys	Val	Asp	Ile	Arg	Leu	Lys	Arg	Val	Val	Pro	Asp	His
	290					295					300				
Tyr	Cys	His	Tyr	Tyr	Pro	Glu	Asn	Val	Lys	Pro	Lys	Pro	Lys	Leu	Lys
305					310					315					320
Glu	Cys	Ser	Met	Asp	Pro	Cys	Pro	Ser	Ser	Asp	Gly	Phe	Lys	Glu	Ile
				325					330					335	
Met	Pro	Tyr	Asp	His	Phe	Gln	Pro	Leu	Pro	Arg	Trp	Glu	His	Asn	Pro
			340					345					350		
Trp	Thr	Ala	Cys	Ser	Val	Ser	Cys	Gly	Gly	Gly	Ile	Gln	Arg	Arg	Ser
		355					360						365		
Phe	Val	Cys	Val	Glu	Glu	Ser	Met	His	Gly	Glu	Ile	Leu	Gln	Val	Glu
	370					375					380				
Glu	Trp	Lys	Cys	Met	Tyr	Ala	Pro	Lys	Pro	Lys	Val	Met	Gln	Thr	Cys
385					390					395					400
Asn	Leu	Phe	Asp	Cys	Pro	Lys	Trp	Ile	Ala	Met	Glu	Trp	Ser	Gln	Cys
				405					410					415	
Thr	Val	Thr	Cys	Gly	Arg	Gly	Leu	Arg	Tyr	Arg	Val	Val	Leu	Cys	Ile
			420					425					430		
Asn	His	Arg	Gly	Glu	His	Val	Gly	Gly	Cys	Asn	Pro	Gln	Leu	Lys	Leu
		435					440					445			
His	Ile	Lys	Glu	Glu	Cys	Val	Ile	Pro	Ile	Pro	Cys	Tyr	Lys	Pro	Lys
	450					455					460				

Glu Lys Ser Pro Val Glu Ala Lys Leu Pro Trp Leu Lys Gln Ala Gln
 465 470 475 480
 Glu Leu Glu Glu Thr Arg Ile Ala Thr Glu Glu Pro Thr Phe Ile Pro
 485 490 495
 Glu Pro Trp Ser Ala Cys Ser Thr Thr Cys Gly Pro Gly Val Gln Val
 500 505 510
 Arg Glu Val Lys Cys Arg Val Leu Leu Thr Phe Thr Gln Thr Glu Thr
 515 520 525
 Glu Leu Pro Glu Glu Glu Cys Glu Gly Pro Lys Leu Pro Thr Glu Arg
 530 535 540
 Pro Cys Leu Leu Glu Ala Cys Asp Glu Ser Pro Ala Ser Arg Glu Leu
 545 550 555 560
 Asp Ile Pro Leu Pro Glu Asp Ser Glu Thr Thr Tyr Asp Trp Glu Tyr
 565 570 575
 Ala Gly Phe Thr Pro Cys Thr Ala Thr Cys Leu Gly Gly His Gln Glu
 580 585 590
 Ala Ile Ala Val Cys Leu His Ile Gln Thr Gln Gln Thr Val Asn Asp
 595 600 605
 Ser Leu Cys Asp Met Val His Arg Pro Pro Ala Met Ser Gln Ala Cys
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 <211> 2538
 <212> DNA
 <213> homo sapiens

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 <211> 845
 <212> PRT
 <213> homo sapiens

<400> 12

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			20					25					30		
Tyr	Phe	Leu	Pro	Glu	Phe	Ala	Leu	Ser	Pro	Gln	Gly	Ser	Phe	Leu	Glu
		35					40					45			
Asp	Thr	Thr	Gly	Glu	Gln	Phe	Leu	Thr	Tyr	Arg	Tyr	Asp	Asp	Gln	Thr
	50					55					60				
Ser	Arg	Asn	Thr	Arg	Ser	Asp	Glu	Asp	Lys	Asp	Gly	Asn	Trp	Asp	Ala
65					70				75						80
Trp	Gly	Asp	Trp	Ser	Asp	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser
			85					90						95	
Tyr	Ser	Leu	Arg	Arg	Cys	Leu	Thr	Gly	Arg	Asn	Cys	Glu	Gly	Gln	Asn
		100						105					110		
Ile	Arg	Tyr	Lys	Thr	Cys	Ser	Asn	His	Asp	Cys	Pro	Pro	Asp	Ala	Glu
	115						120						125		
Asp	Phe	Arg	Ala	Gln	Gln	Cys	Ser	Ala	Tyr	Asn	Asp	Val	Gln	Tyr	Gln
	130					135					140				
Gly	His	Tyr	Tyr	Glu	Trp	Leu	Pro	Arg	Tyr	Asn	Asp	Pro	Ala	Ala	Pro
145				150					155						160
Cys	Ala	Leu	Lys	Cys	His	Ala	Gln	Gly	Gln	Asn	Leu	Val	Val	Glu	Leu
			165					170						175	
Ala	Pro	Lys	Val	Leu	Asp	Gly	Thr	Arg	Cys	Asn	Thr	Asp	Ser	Leu	Asp
		180						185					190		
Met	Cys	Ile	Ser	Gly	Ile	Cys	Gln	Ala	Val	Gly	Cys	Asp	Arg	Gln	Leu
	195						200					205			
Gly	Ser	Asn	Ala	Lys	Glu	Asp	Asn	Cys	Gly	Val	Cys	Ala	Gly	Asp	Gly
	210					215					220				
Ser	Thr	Cys	Arg	Leu	Val	Arg	Gly	Gln	Ser	Lys	Ser	His	Val	Ser	Pro
225				230						235					240
Glu	Lys	Arg	Glu	Glu	Asn	Val	Ile	Ala	Val	Pro	Leu	Gly	Ser	Arg	Ser
			245					250						255	
Val	Arg	Ile	Thr	Val	Lys	Gly	Pro	Ala	His	Leu	Phe	Ile	Glu	Ser	Lys
	260							265					270		
Thr	Leu	Gln	Gly	Ser	Lys	Gly	Glu	His	Ser	Phe	Asn	Ser	Pro	Gly	Val
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Phe	Val	Val	Glu	Asn	Thr	Thr	Val	Glu	Phe	Gln	Arg	Gly	Ser	Glu	Arg
	290					295					300				
Gln	Thr	Phe	Lys	Ile	Pro	Gly	Pro	Leu	Met	Ala	Asp	Phe	Ile	Phe	Lys
305				310						315					320
Thr	Arg	Tyr	Thr	Ala	Ala	Lys	Asp	Ser	Val	Val	Gln	Phe	Phe	Phe	Tyr
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Gln	Pro	Ile	Ser	His	Gln	Trp	Arg	Gln	Thr	Asp	Phe	Phe	Pro	Cys	Thr
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Val	Thr	Cys	Gly	Gly	Gly	Tyr	Gln	Leu	Asn	Ser	Ala	Glu	Cys	Val	Asp

		355					360					365				
Ile	Arg	Leu	Lys	Arg	Val	Val	Pro	Asp	His	Tyr	Cys	His	Tyr	Tyr	Pro	
	370					375					380					
Glu	Asn	Val	Lys	Pro	Lys	Pro	Lys	Leu	Lys	Glu	Cys	Ser	Met	Asp	Pro	
385					390					395					400	
Cys	Pro	Ser	Ser	Asp	Gly	Phe	Lys	Glu	Ile	Met	Pro	Tyr	Asp	His	Phe	
				405					410					415		
Gln	Pro	Leu	Pro	Arg	Trp	Glu	His	Asn	Pro	Trp	Thr	Ala	Cys	Ser	Val	
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